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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,239	08/31/2001	Peiguang Zhou	KCC-16,163	1306
7590	05/31/2005		EXAMINER	
Senniger, Powers, Leavitt & Roedel One Metropolitan Square, 16th Floor St. Louis, MO 63102			BOYD, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,239

Applicant(s)

ZHOU ET AL.

Examiner

Jennifer A. Boyd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-33 and 70-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-33 and 70-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/7/05, 3/14/05, 3/21/05, 3/31/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 31, 2004 has been entered. The Applicant's Amendments and Accompanying Remarks, filed March 31, 2004, have been entered and have been carefully considered. Claims 24 – 33 and 70 - 82 are pending. In view of Applicant's arguments, the Examiner withdraws all previously set forth rejections. However, after an updated search, additional prior art has been found which renders the invention as currently claimed unpatentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 24 - 33 and 70 – 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanzer (WO 01/15646) in view of Hall (US 3,370,106).

Tanzer is directed to an absorbent article having superabsorbent in discrete pockets on a stretchable substrate (Title).

As to claims 24 and 70, Tanzer teaches an *absorbent composite 44* comprising a selectively stretchable liquid permeable *first substrate layer 46* and a selectively stretchable *second substrate layer 48* (page 6, lines 1 – 5 and Figure 2). Tanzer teaches that a *neckable web 112* may be used for either the *first substrate layer 46* or the *second substrate layer 48* or both (page 9, lines 6 – 10). The *layers 46* and *48* can be secured by a water insensitive attachment means (page 6, lines 25 – 28).

As to claims 32 – 33, Tanzer teaches that the *neckable web 112* may be a porous nonwoven material, such as a spunbonded web, meltblown web or bonded carded web (page 9, lines 23 – 25). The *neckable material 112* may be made of fiber forming polymers, such as polyolefins (page 9, lines 24 – 26), which are known in the art to be thermoplastic materials.

As to claim 71, Tanzer teaches that the *neckable web 112* can comprise a first layer of spunbonded polypropylene, a middle layer of meltblown polypropylene and a second layer of spunbonded polypropylene (page 10, lines 1 – 10).

As to claim 72, Tanzer teaches that either or both *layers 46* and *48* can comprise a *neckable web 112*, which may be a porous nonwoven material such as a spunbonded web.

As to claims 24 and 70, Tanzer fails to teach that the water insensitive attachment means is an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000. As to claims 73 – 74, Tanzer fails to teach that the adhesive composition is hot-melt processable at a temperature of about 450

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°F and is in liquefied form. As to claim 75, Tanzer fails to teach that the adhesive composition has an atactic polymer with a degree of crystallinity less than about 15%. As to claim 76, Tanzer fails to teach that the adhesive composition has an isotactic polymer with a degree of crystallinity of at least 60%. As to claim 77, Tanzer fails to teach that the adhesive composition comprises between about 50 and about 90 weight percent of atactic polymer and between about 5 and 50 weight percent of the isotactic polymer. As to claim 78, Tanzer fails to teach that the atactic polymer is selected from the group consisting of a low density polyethylene, atactic polystyrene, atactic polybutene, amorphous polyolefin copolymer and combinations thereof. As to claim 79, Tanzer fails to teach that the atactic polymer comprises atactic polypropylene. As to claim 81, Tanzer fails to teach that the isotactic polymer is polypropylene.

Hall is directed to a hot-melt adhesive composition (Title) useful for bonding wood, paper, plastics, textiles and other materials. Hall teaches a hot-melt adhesive blend comprising atactic polypropylene and a small portion of a different polymer selected from the group consisting of isotactic polypropylene and polyethylene (column 1, lines 46 - 50). The hot-melt adhesive composition preferably comprises a solid atactic polypropylene (essentially non-crystalline) having a molecular weight in the range of 15,000-60,000 (column 1, lines 57 - 69). It should be noted that essentially non-crystalline means having a degree of crystallinity around 0%. The isotactic (essentially crystalline) component has a molecular weight ranging from 85,000 to 95,000 (column 2, lines 19 - 25 and lines 39 - 45). It should be noted that essentially crystalline means having a degree of crystallinity around 100%.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hot-melt adhesive composition of Hall in the absorbent composite of Tanzer motivated by the desire to produce a composite containing an low-cost adhesive with high performance properties (Hall, column 1, lines 20 – 30).

As to claim 31, Tanzer in view of Hall fails to teach that the first and second layers comprise a single material, said material being folded over and adhesively bonded to itself. However, it would have been obvious to fold over the material of the first layer to create the second layer in order to save manufacturing costs while increasing strength. Additionally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fold the first layer, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416.

As to claim 80, it should be noted that Tanzer in view of Hall teaches the use of atactic polypropylene and isotactic polypropylene in the adhesive composition, but does not specifically teach the use of polyethylene. However, polypropylene and polyethylene are both polyolefins and it would be obvious to interchange the two polyolefins because they are similar in properties and commonly used for the same products. It would have been obvious to one having ordinary skill in the art at the time the invention was made to interchange polyethylene for polypropylene as the atactic and isotactic components, since it has been held to be within the general skill of a

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worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416.

As to claims 25 – 30, although Tanzer in view of Hall does not explicitly teach the claimed static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30, it is reasonable to presume that static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30 is inherent to Tanzer in view of Hall. Support for said presumption is found in the use of like materials (i.e. a first layer attached to a second layer using an adhesive composition comprising a blend of about 10 – 90 weight percent of an amorphous polypropylene having a molecular weight of at least 150,000 and about 10 – 90 weight percent of a crystalline polypropylene having a molecular weight of less than about 300,000) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of static-peel-failure time of at least one hour as required by claim 25, static-peel-failure time of at least 8 hours as required by claim 26, static-peel-failure time of at least 24 hours as required by claim 27, relative accretion value of less than 1 as required by claim 28, relative

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accretion value of less than 0.5 as required by claim 29 and relative accretion value of less than 0.2 as required by claim 30 would obviously have been present once the Tanzer in view of Hall product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claim 82, the details of the patent are discussed above.

Response to Arguments

4. Applicant's arguments with respect to claims 24 – 33 and 70 - 82 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer Boyd

May 24, 2005


Ula C. Ruddock
Primary Examiner
Tech Center 1700